

**HARD COATING FILM HAVING HIGH REFRACTIVE INDEX**

Patent Number: JP3068901  
Publication date: 1991-03-25  
Inventor(s): NISHII MICHIAKI; others: 01  
Applicant(s):: TORAY IND INC  
Requested Patent: JP3068901  
Application Number: JP19890205525 19890807  
Priority Number(s):  
IPC Classification: G02B1/10 ; B29D11/00 ; B32B7/02 ; B32B9/00  
EC Classification:  
Equivalents:

**Abstract**

**PURPOSE:** To obtain a hard coating film having a high refractive index by obtaining the cured matter of a compsn. essentially composed of the fine particles of a specific average particle size, which are obtd. by treating the fine particles of an inorg. oxide essentially consisting of Ti oxide with silica and org. Si compd. and the compd. Selected from a specific org. Si compd., etc.

**CONSTITUTION:** This hard coating film consists of the cured matter of the compsn. essentially composed of the fine particles of 1 to 300µm average particle size, which are formed by treating the fine particles consisting of the inorg. oxide contg.  $\geq 40\text{wt. \%}$  titanium oxide with the silica and/or the org. Si compd., and  $\geq 1$  kinds of the compds. selected from the org. Si compd. expressed by formula and the hydrolyzate thereof. In the formula, R, R<1>, R<2>, R<3> are 1 to 10C org. group; X<1>, X<2>, X<3> are a hydrolyzable group; a, b, c are 0 or 1. Y is 2 to 40C org. group. The hard coated film having the high refractive index and excellent weatherability, etc., is obtd. in this way.

Data supplied from the esp@cenet database - 12